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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980.867	03/19/2002	Kunio Fukuda		1382
530	7590	09/20/2006	EXAMINER	
LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			SHAH, CHIRAG G	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/980,867	FUKUDA, KUNIO	
	Examiner	Art Unit	
	Chirag G. Shah	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

3. Applicant's amendment necessitated withdrawal of Provision Double Patenting rejection of previous office action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 5-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander (U.S. Patent No. 6,272,120) in view of McKinley et al. (U.S. Patent No. 5,805,834), hereinafter McKinley and further in view of Hokkanen (U.S. Patent No. 5,675,628).

Regarding claims 1 and 5, Alexander discloses in **figs. 1 and 3** of a communication apparatus [**multi-radio bridge 100, see figs. 1 and 3**] and method, comprising:

first radiocommunication means [**multi-radio bridges includes two or more radio devices, the first radiocommunication means is one of the two or more radio devices, see col. 5, lines 8-12 and fig. 3**] for sending data to a host device [**host device 132, fig. 1**] and receiving data from the host device [**host device 132, fig. 1**] via a radio communication network [**via wired backbone network 130, fig. 1**];

external radiocommunication means [**multi-radio bridges includes two or more radio devices, the second radiocommunication means is second of the two or more radio devices, see col. 5, lines 8-12 and fig. 3**] for connection to an external communication network [**one of Bridge A or Bridge B or Bridge C operating in DS or FH system, see fig. 1**] outside the radiocommunication network [**via wired backbone network 130, fig. 1**] to send data to and to receive data from the external communication network [**via wireless radio network operating in DS or FH system, see col. 5, lines 23-50 and fig. 1**];

storage means [**memory 286, fig. 3 and col. 8, lines 20-41**] for storing a radiocommunication protocol [**wired Ethernet protocol, see fig. 1**] for use in sending and receiving data within the radiocommunication network [**wired backbone network 130, see fig.**

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1], an external communication protocol [**FS or DS protocol, see col. 5, lines 23-43 and fig. 1**] for use in sending and receiving data to and from the external communication network [**via wireless radio network operating in DS or FH system, see col. 5, lines 23-50 and fig. 1**], and communication setting information on the external communication network [**memory stores program code and information such as where devices are registered from the external communication network with mobile devices, see col. 8, lines 20-41**]; and

Alexander discloses in **col. 5, lines 23-49** of the multi-radio bridge 100 having a central processor for controlling the radiocommunication means [**first radio of two or more radios, see col. 5, lines 23-49**] and the external radiocommunication means [**second radio of two or more radios, see col. 5, lines 23-49**] to transfer data between the external communication network [**external LAN networks, fig. 1**] and the host device [**host device 132, fig. 1**] with respective protocols.

Alexander fails to explicitly disclose communication controlling means for setting information stored in the storage means to set a connection with the external communication network according to the external communication protocol while controlling the radiocommunication means to set a connection with the host device according to the radiocommunication protocol stored in the storage means to control the radiocommunication means and the external communication means to transfer data between the external communication network and the host device.

McKinley discloses in figure 1 and 2A, column 3, lines 12-45 and respective portions of the specification of a PCMCIA (radio) card 118 that may be used with a computer or a mobile device for a variety of functions. Included within the peripheral function card 118 of figure 1 are

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a memory card 122a, which may be configured to communicate with a host device such as a computer, two I/O controller chips 122b, 122c, adaptor chip, and EEPROM. Furthermore, McKinley discloses in claims 1 and 2 and in column 7, lines 38 to column 8, lines 43 that the PCMCIA card has memory storage for storing configuration programming information as information related to communication network. McKinley further discloses in figure 1 and in column 5, lines 21 to column 6, lines 34 of controller chips, which enables communication with a remote computer system. Therefore, it would have been obvious to one of ordinary skills in the art to modify the teachings of Alexander to include explicit functions, the storage and control means of a radio card as disclosed by McKinley. One is motivated as such in order for using the configuration programming information read from the memory storage device to configure the bridging circuit to bridge a communication path between the internal bus system and one of the plurality of other bus systems.

Alexander in view of McKinley fails of storing authentication information and disclose of authenticating means for carrying out an authentication process based on the authentication information with a server connected to the external network.

Hokkanen discloses in col. 1, lines 10-14, col.2, lines 57-65, col. 4, lines 20-25 and col. 5, lines 8-52 of a removable subscriber identification module (SIM card) similar to a PCMCIA radio card that function to store data related to an identification and authentication of a mobile subscriber. Thus, the SIM storage capability provides facilities to memorize and manage additional authentication elements related to the mobile subscribers. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Alexander in view of McKinley to incorporate a network interface card including

the authentication for accessing external network as taught by Hokkanen. One is motivated as such in order to access different systems or networks without the user having to change his/her user profile when the terminal needs to be changed.

Regarding claims 2 and 6, Alexander discloses in figs. 1 and 3 of the apparatus [multi-radio bridge 100, see figs. 1 and 3], Alexander discloses in col. 8, lines 20-42 of the multi-radio bridge apparatus, wherein the information storage means [memory 286] stores mobile telephone communication protocol for use in connecting to the mobile network [e.g. mobile terminals and hosts]. ; and

the communication controlling means [central processor for the multi-bridge radio 100, see col. 5, lines 23-43] sets a relation of connection between the mobile network [wireless network having mobile terminal 172, fig. 1] and the host device [Host 132, fig. 1] via the radiocommunication network [see fig. 1] as claim.

Regarding claims 3 and 7, Alexander discloses in col. 8, lines 20-42 of the multi-radio bridge apparatus, wherein the information storage means [memory 286] stores personal information of a user that operates the host device [e.g. mobile terminals and hosts]. Alexander, however fail to disclose the communication controlling means uses the communication setting information stored in the storage means and the personal information stored in the storage means to set a relation of connection between the host device and the external communication network.

McKinley discloses wherein the individual information is stored in the storage means as information related to a user operating the host equipment, and wherein the communication

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control means sets the connection between the host equipment and the communication setting information and the individual information stored in the storage means [see in figure 1 and in column 7, lines 38 to column 8, lines 43, where RAM stores address ranges, pin configurations, and status flags related to user operating the host equipment, the new configuration programming loaded into the EEPROM is then used to reconfigure the adaptor circuit to bridge a communication path]. Therefore, it would have been obvious to one of ordinary skills in the art to modify the teachings of Alexander to include explicit functions, the storage and control means of a radio card as disclosed by McKinley. One is motivated as such in order for using the configuration programming information read from the memory storage device to configure the bridging circuit to bridge a communication path between the internal bus system and one of the plurality of other bus systems.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander and McKinley in view of Hokkanen as applied to claims 1-3 and 5-7 above, and further in view of Hind (U.S. Patent No. 6,772,331).

Regarding claims 4 and 8, Alexander in view of McKinley fails to explicitly disclose the apparatus, wherein the storage means stores one of PPP (point to point protocol), IP (Internet

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protocol), and TCP (transport control protocol); and the communication controlling means uses one of the protocols stored in the storage means to set a connection between the host device and the external communication network and to control the data transfer between the host device and the external communication network.

Hind discloses teaches column 1, lines 18-22 of a short-range network for securely transmitting information among wireless devices. Hind disclose a method and a device (radio within every mobile device as disclosed in column 1, lines 38-54, figure 3) comprising: wired communication means for providing/receiving data via physical connection means to/from a mounted host equipment [as disclosed in column 1, lines 38-54 and column 2, lines 10-23 and in figure 3, where a Blue tooth radio is attached to every mobile device]; short distance radio communication means for transmitting/receiving data to/from an external communication network via a short distance radio communication network [as discloses in column 2, lines 10-23 and figure 3, where an access point or wireless device with a Bluetooth radio can attach a picocell to an enterprise LAN or WAN]. Hind discloses in column 7, lines 46-67 and column 2, lines 11-23 of the radio module using TCP/IP, the radio module has a memory and discriminates by using TCP/IP for transmission between host and enterprise WAN. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Alexander and McKinley in view of Hokkanen to include incorporating transmission between host and external networking using TCP/IP in order to provide connections over interconnected networks.

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8. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander (U.S. Patent No. 6,272,120) in view of McKinley et al. (U.S. Patent No. 5,805,834), hereinafter McKinley.

Regarding claims 1 and 5, Alexander discloses in **figs. 1 and 3** of a communication apparatus [**multi-radio bridge 100, see figs. 1 and 3**] and method, comprising:

first radiocommunication means [**multi-radio bridges includes two or more radio devices, the first radiocommunication means is one of the two or more radio devices, see col. 5, lines 8-12 and fig. 3**] for sending data to a host device [**host device 132, fig. 1**] and receiving data from the host device [**host device 132, fig. 1**] via a radio communication network [**via wired backbone network 130, fig. 1**];

external radiocommunication means [**multi-radio bridges includes two or more radio devices, the second radiocommunication means is second of the two or more radio devices, see col. 5, lines 8-12 and fig. 3**] for connection to an external communication network [**one of Bridge A or Bridge B or Bridge C operating in DS or FH system, see fig. 1**] outside the radiocommunication network [**via wired backbone network 130, fig. 1**] to send data to and to receive data from the external communication network [**via wireless radio network operating in DS or FH system, see col. 5, lines 23-50 and fig. 1**];

storage means [**memory 286, fig. 3 and col. 8, lines 20-41**] for storing a radiocommunication protocol [**wired Ethernet protocol, see fig. 1**] for use in sending and receiving data within the radiocommunication network [**wired backbone network 130, see fig. 1**], an external communication protocol [**FS or DS protocol, see col. 5, lines 23-43 and fig. 1**] for use in sending and receiving data to and from the external communication network [**via**

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wireless radio network operating in DS or FH system, see col. 5, lines 23-50 and fig. 1], and communication setting information on the external communication network [memory stores program code and information such as where devices are registered from the external communication network with mobile devices, see col. 8, lines 20-41]; and

Alexander discloses in **col. 5, lines 23-49** of the multi-radio bridge 100 having a central processor for controlling the radiocommunication means [**first radio of two or more radios, see col. 5, lines 23-49**] and the external radiocommunication means [**second radio of two or more radios, see col. 5, lines 23-49**] to transfer data between the external communication network [**external LAN networks, fig. 1**] and the host device [**host device 132, fig. 1**] with respective protocols.

Alexander fails to explicitly disclose communication controlling means for setting information stored in the storage means to set a connection with the external communication network according to the external communication protocol while controlling the radiocommunication means to set a connection with the host device according to the radiocommunication protocol stored in the storage means to control the radiocommunication means and the external communication means to transfer data between the external communication network and the host device.

McKinley discloses in figure 1 and 2A, column 3, lines 12-45 and respective portions of the specification of a PCMCIA (radio) card 118 that may be used with a computer or a mobile device for a variety of functions. Included within the peripheral function card 118 of figure 1 are a memory card 122a, which may be configured to communicate with a host device such as a computer, two I/O controller chips 122b, 122c, adaptor chip, and EEPROM. Furthermore,

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McKinley discloses in claims 1 and 2 and in column 7, lines 38 to column 8, lines 43 that the PCMCIA card has memory storage for storing configuration programming information as information related to communication network. McKinley further discloses in figure 1 and in column 5, lines 21 to column 6, lines 34 of controller chips, which enables communication with a remote computer system. It is apparent in the art and according to the teachings above that a computer or a mobile without a PCMCIA (radio) card don't not have the external communication protocol and the communication setting information stored for communication to external networks. Therefore, it would have been obvious to one of ordinary skills in the art to modify the teachings of Alexander to include explicit functions, the storage and control means of a radio card as disclosed by McKinley. One is motivated as such in order for using the configuration programming information read from the memory storage device to configure the bridging circuit to bridge a communication path between the internal bus system and one of the plurality of other bus systems.

9. Claims 4 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander and McKinley in view of Hokkanen as applied to claims 1-3 and 5-7 above, and further in view of Hind (U.S. Patent No. 6,772,331).

Regarding claim 10, Alexander in view of McKinley discloses of implementation in a wireless local area network system. Alexander in view of McKinley fails to disclose of short-range communication network is a Bluetooth network. Hind discloses the short-range communication network is a Bluetooth network [as disclosed in column 1, lines 38-54 and column 2, lines 10-23 and in figure 3, where a Blue tooth radio is attached to every mobile

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device]. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Alexander in view of McKinley to include the teaching of the short-range communication network as Bluetooth network since Bluetooth network represents a network of local area, which operates using similar RF protocols.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G. Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7682. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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cgs

September 18, 2006

A handwritten signature in black ink, appearing to read 'Chirag G. Shah', with a stylized flourish at the end.

Chirag G. Shah

Patent Examiner, 2616